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INFLUENZA.

Epidemic influenza has reached the Pacific Coast in its pandemic progress from eastern Europe around the world. It is doubtless the same disease which appeared in pandemic form in 1889-1890, and previous to that, at more or less regular periods for many centuries. Its specific cause is unknown, although the name "influenza bacillus" was attached by Pfeiffer in 1892 to a certain organism found in the nasal and bronchial secretions. This bacillus is found in only a minority of cases in the present epidemic. It has been found in the highest percentage in naso-pharyngeal swabs, and has been isolated also post mortem in pure culture from pneumonic lung tissue. Various other organisms have been found associated with the present outbreak, especially a gram-positive pleo-morphic coccus, tending to grow in chains and to produce involution forms. It is believed that a filterable virus can be excluded. Secondary pneumonias have yielded pure cultures of pneumococci, Pfeiffer's bacilli and streptococci. Blood cultures are uniformly negative.

Epidemic influenza, to use the Italian term, or la grippe, after the French, is characterized now as previously, by the extraordinary speed of its spread, this being, however, no more rapid than means of human conveyance, and by the high percentage of the population attacked. In Spain 30 per cent. of the population are reported to have suffered from the disease. Previous epidemics have attacked as high as 40 per cent. of the population. Thus far from 10 to 15 per cent. of the cases have been complicated with pneumonia, to which most of the fatalities are due. Approximately one-third of the pneumonias prove fatal, although there is reason for believing that this mortality will be lower in California.

While one attack does not confer immunity, the individual seeming possibly even to be more susceptible, it is nevertheless true that the great majority of the present cases are under 30 years of age. In other words, this epidemic flourishes principally among those persons who were born after the pandemic of 1889-1890. This, like preceding epidemics, has a definite sporadic onset associated with carriers from the infected zone, a period of increase to a peak, with a gradual subsidence, the average epidemic duration being six to eight weeks. Its death rate, aside from complications, is characteristically low, in this, as in high morbidity, closely resembling dengue. Earlier reports from the army in France cataloged the disease as "three-day" fever, a term ordinarily applied to a more or less indeterminate group of fevers related to sand-fly fever, or "dengue-like" fevers. There is, however, no question of an insect carrier in influenza as the disease is definitely contagious and transmitted directly by droplet infection.

The onset is usually sudden with severe general pain, especially in the back, head, chest and limbs. Vomiting and epistaxis are frequent. Weakness and prostration are marked from the first. Anorexia and insomnia are characteristic, although in the first two days the patient is often semi-stuporous. The temperature is irregular between 100° and 104°. Some cases show a flat course at 102°, for instance, lasting three to five days, with abrupt termination. With extreme aching, soreness and prostration, some cases have a fever not exceeding 100° and often little above 99°. The more common type is a rise to 103° or 104° or more with slight remissions for from one to three days, and then an irregular decline, often with exacerbations after a day or two of normal temperature.

The pulse is usually slow as compared with the

fever and the respiration rate normal. Moderately inflamed tonsils are often seen and a definite but minor percentage have moderate conjunctivitis and photophobia. Dry, reddened pharynx, with aching throat, is frequent. A slight rhinitis usually follows in a few days but is seldom pronounced. In the California cases thus far cervical adenitis is rare. A leukopenia is characteristic and a white count over 8-10000 suggests a complication or wrong diagnosis. Many severe cases have less than 4000 leucocytes. Even in secondary pneumonia, the leucocytes are usually low. The urine shows only the manifestations due to fever. Epistaxis is a prominent feature in many cases, with occasional hemorrhage from the bladder or bowels. Occasional cases show a definite gastro-intestinal localization, with intractable vomiting, diarrhea, and more or less colic. Meningitic symptoms are rare.

The incubation period is not definitely known, probably ranging from one to four days. The significance of carriers and the development of acute influenza in carriers, are likewise undetermined. It is possible, as in cholera, that a carrier may remain healthy until some local exciting disorder determines the onset of the specific disease. Thus in cholera, a carrier may develop an acute choleraic lesion under the influence of a non-specific diarrhea or gastro-intestinal irritant, chilling, fatigue, etc. Such a supposition would explain why influenza so often follows an ordinary coryza, acute bronchitis, fatigue, chilling, etc.

No specific treatment for influenza is available, but because of the near-hysteria attending the popular interest in this epidemic, numerous sure-cures are receiving publicity in both medical and lay circles. Physicians should be conservative, yet open-minded, on this subject. Indiscriminate experimentation on patients should be severely condemned. Here is a striking example of where animal experimentation would be of the utmost value except that, unfortunately, influenza cannot thus far be induced in animals.

The most successful symptomatic treatment centers in the use of salicylic acid. A good method of administration is such a formula as follows:

℞—Acid acetyl salicylic .2
Acetphenetidi .1
Sod. bicarb. .1

Such a capsule given each 1 to 4 hours.

The antipyretic, analgesic and disinfectant action of salicylic acid seems of particular value here. Sodium salicylate in 5 gram doses, with 0.5 gram sodium bicarbonate, given in 10.cc. distilled water intravenously, has been highly extolled, but does not seem to offer definite advantage over oral administration as a routine.

The bowels should be kept free with salines and an abundant fluid intake insured, amounting to at least 2500 cc. daily. Lemonade with 2 tsp. lactose and ½ tsp. sod. bicarb. makes a pleasant and effective drink. Rest in bed with abundant sunshine, fresh warm air, and good nursing are extremely important for quick recovery and avoidance of complications. Hydrotherapy has not been of material assistance, the higher temperatures proving very resistant. Spraying of mouth, throat and nose several times a day with 1:1000 quinine bisulphate solution containing an equal quantity of menthol, seems of distinct benefit. A clean mouth is imperative. For the racking cough and soreness in the bronchial passages, ipecac has given benefit. It can be prescribed as capsules of powdered ipecac, .065 gram each, three or more times a day. If the cough is more severe, Dover's powder in small repeated doses, is effective. Sometimes ammonium chloride inhalations, or in solution by mouth, or inhalations of benzoin and eucalyptus with a modicum of menthol, give marked relief.

As fast as the patient's appetite allows, the diet should be increased in caloric content, an effort being made to supply a minimum of 2500 calories daily. The diet list may include such articles as the following: Whole milk, one quart; cereal, lactose custard, gelatin jelly, toast, butter, cream, eggs, six to eight daily, best as eggnogs, malted milk, ice cream. Feedings should be each three hours. Abundant fruit juices, carbohydrates and alkali are important.

The development of complications should be watched for closely. Pneumonia, otitis media, bronchitis, and cardiac weakness should be treated secundum artem. A daily chest examination is important to detect local congestion, which occurs chiefly in the bases and more on the left side. "Migratory pneumonia" is of frequent occurrence. Diagnosis should not await definite dullness. Leucocytes, temperature and respiration often remain low in the presence of a beginning broncho-pneumonia. The pulse, too, may give no index of pneumonic development. The pneumonia may become frankly lobar, but as a rule is of a lobular or broncho-pneumonic type. At autopsy what clinically seemed a lobar lesion, often proves to be a massive almost miliary broncho-pneumonia, involving from one lobe to all of both lungs.

Prophylaxis is of the utmost importance. Absolute quarantine will prevent introduction of influenza. No definitely effective vaccine or serum is yet available. In the care of patients in hospital, cubicle isolation is easily secured by stringing wires six feet from the floor between all beds and from these hanging sheets by means of heavy paper clips. Head sheets are not necessary and if the footboards of the beds on opposite sides of the ward are more than ten feet apart, foot sheets are unnecessary. Doctors, nurses and attendants should wear caps, gowns and gauze masks. The last should have four layers of gauze and cover nose and mouth with a wide margin. Five by eight inches is a good size. They should be changed at least once per hour and disinfected in 5% liquor cresolis comp. or equivalent before being washed and dried. As in pneumonic plague, droplet infection is the chief method of conveyance, and therefore most to be guarded against. Hands should be carefully washed with warm water and soap before touching any part of the person unprotected by cap and gown. Dishes should be sterilized by boiling or immersion in 5% liquor cresolis comp. Toilet or other soft paper should be used in place of handkerchiefs and after use should be deposited in paper sacks

pinned to the bed within easy reach of the patient. These should be burned daily. Pasteboard sputum cups should contain ¼ inch 5% liquor cresolis comp. and be changed at least daily. Disinfection of stools and urine is unnecessary. For personal prophylaxis, Dr. Sanford Blum of San Francisco urges the use of potassium iodid or syrup of hydriodic acid, in small repeated doses.

Prophylaxis should include sufficient sleep, rest, open air and sunshine. Crowded street cars and indoor gatherings of all sorts must be eschewed. Sneezing or coughing without the face protected by a handkerchief is a sanitary crime. Spitting should be similarly repressed. Gauze masks should be worn in public by all persons where influenza is epidemic.

THE PSYCHOPATHIC HOSPITAL IDEA.

One of the institutions badly needed by California, and especially by the community in and about San Francisco, is a Psychopathic Hospital, and the medical profession as a whole should interest itself in the effort now being made to obtain such.

The functions of such a hospital are many, important among them being, first of all, to serve as a nucleus, about which a rational program for the state care of those with nervous or mental disease or defect, can be built. To be sure, each institution should be a center of psychiatric activity for its own area, but there should be a center of centers, from which should emanate scientific inspiration, and co-ordinate plans as well as trained assistants to supply other institutions. By concentrating certain state-wide functions in such an institution many things can be more adequately and economically accomplished. Furthermore, by being located in the city, it serves as a first line of attack against the problem of disease, thus bringing early and borderline cases to the attention of experts. This is especially true of its Out-patient Department, where large numbers of cases may be seen which would otherwise get to a state hospital too late for benefit. Its social service department would supply a long-felt want. Finally, as an educational center both for students, practitioners and the laity, it is the first move toward rational preventive medicine and mental hygiene.

However, the time has long since passed when it is necessary to enumerate arguments in favor of a Psychopathic Hospital. That one is an absolute necessity is a truism. At present the only argument against its immediate erection is the expense. Surely, a rich, self-conscious state like California will not lag behind and allow this need to continue unmet. The thousands of dollars now spent by courts, social agencies, schools, charitable organizations and hospitals in trying to solve these problems of the psychopathic individuals would more than build and maintain a Psychopathic Hospital.

NEWSPAPERS AND THE DOCTOR.

How the average newspaper does enjoy poking fun at the doctor! And how often it slurs him and his work, and by innuendo and unrefuted misstatement allows him to suffer injustice! Such, doubtless, is to be expected and as a general thing arouses only amusement at the expense of the newspaper. As, for instance a San Francisco paper recently published an editorial suggesting that much well-intended medical enterprise is misdirected as promoting disease by advertising it. Of course the fallacy of such a statement is self-evident, except, apparently to its sapient author. It is of record that non-medical persons with a prurient regard for medical literature, have died of a misprint. Others, too, assuming the practice when they were ignorant of the theory, have died of a wrong dilution and of taking it internally instead of by inunction of the skin.

Such instances, doubtless, afford the thoughtful editor quoted above, full justification for holding the medical profession entirely to blame. As Dr. Rucker once said, the child dead of whooping cough is just as dead as if he had died of diphtheria. It is a matter of indifference to the tubercle bacillus whether his victim be Eddyite, Christian, Greek or barbarian, gutter-snipe or man of destiny, so long as he finds the soil favorable and his growth unchecked. Not advertising the disease will not eliminate it, as has been amply demonstrated in the past. The deaths above 1 to 10,000 cases of influenza may be due entirely to fear, as certain Eddyites proclaim, but the persons involved are just as dead as if the pathologic lesions of the autopsy table were really responsible for the death.

Why should newspapers disregard the proved facts of science and the tested good judgment and sound desire of the great majority of their readers? Do they imagine that good comes from such specious chatter? Or are they trying to cater to some small clique with a private grudge, and dare not boldly state their true position?

Along with the above might be noted in the same newspaper quoted a half-column squeal from a self-styled physician inveighing against the injustice and chicanery of the State Board of Medical Examiners for having refused him, and many like him, license to practice medicine in California. Of course he neglected to say that the Board of Medical Examiners has as its one function, in law and practice, not the protection and aggrandizement of physicians, but solely the protection and welfare of the public, and is created by and responsible to, that public. Also the aforenoted newspaper, not only printed no suggestion of repudiation of the outrageous indictment brought by this disgruntled black sheep, but apparently concurred in his diatribe, even heading it with large display type.

Some day newspapers of the west will so far value science and its contribution to life, and will so enhance their appreciation of newspaper fact, and will so correctly value the taste, desire and mentality of their readers, that they will imitate certain of the great eastern dailies, which have a well-trained medical staff member to edit their medical and scientific news and editorials.

VOLUNTEER MEDICAL SERVICE CORPS.

Some misunderstanding has arisen of late regarding the status, function and usefulness of the V. M. S. C. In another column will be found a condensed and complete statement of the reorganized corps. This should be read with attention by every physician not in the army, the navy